

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. Canceled
2. Canceled
3. Canceled
4. Canceled
5. Canceled
6. Canceled
7. Canceled
8. (Previously presented) A nanostructured particulate lithium titanate intercalation compound comprising an average primary particle size of less than 100 nm.
9. (Previously presented) A nanostructured particulate lithium titanate intercalation compound having an average primary particle sizes of less than 100 nm synthesized by a method comprising:
 - Providing a homogeneous mixture of co-reactant precursors comprising nanostructure TiO_2 and at least one thermolabile source of lithium ions;
 - Heating said mixture rapidly to a reactive annealing temperature of about 750-800 C;
 - Holding said mixture at said annealing temperature for a period of time not substantially longer than that required to effect the maximum available reaction of said mixed precursors in synthesizing said intercalation compound particles of less than 100 nm; and

Cooling said synthesized particles rapidly to a temperature below the reaction temperature required for the synthesis of said intercalation compound thereby preventing further growth of said particles.

10. (Previously presented) A rechargeable electrochemical cell comprising:

A negative electrode member comprising a first electrochemically active material;

A positive electrode member comprising a second electrochemically active material; and

A separator member comprising an electrolyte interposed between said negative and positive electrode members;

Wherein at least one of said active materials comprises a nanostructured particulate lithium titanate intercalation compound having an average primary particle sizes of less than 100 nm.

11. (Previously presented) An electrode comprising nanostructured lithium titanate particles comprising an average primary particle size of less than 100 nm.